

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for controlling load in a telecommunication system ~~comprising~~ including a network part ~~(100, 114, 116, 340)~~, at least one subscriber terminal ~~(104)~~ and a telecommunication connection ~~(108)~~ between the network part ~~(100, 114, 116, 340)~~ and the subscriber terminal ~~(104)~~, ~~in which~~ the method comprising:

using the telecommunication connection ~~(108)~~ ~~is used~~ for connection setup and data transfer, the telecommunication connection ~~(108)~~ ~~comprises~~ including a channel for relaying channel allocation requests transmitted by the subscriber terminal to the network part ~~(100, 114, 116, 340)~~, and

characterized by controlling the telecommunication system load by adjusting the capacity of the channel used for relaying the channel allocation requests.

2. (Currently Amended) A method as claimed in claim 1, ~~characterized by~~ further comprising decreasing channel capacity when a base station system becomes overloaded, and when the load drops to a desired level, increasing the channel capacity.

3. (Currently Amended) A method as claimed in claim 1, ~~characterized by~~ further comprising configuring a logical packet associated control channel PCCCH for the resource of a packet data channel PDCH including ~~comprised by the radio telecommunication connection (108), which the PDCH resource comprised by~~ including the a logical PCCCH channel is divided into an uplink resource and downlink resource, ~~which the uplink resource is being divided between~~ a packet random access channel PRACH, a packet data traffic channel PDTCH and a packet associated control channel PACCH, and

~~which the uplink resource, which is not fixedly configured as the PRACH channel, is being~~ dynamically allocated to the PRACH, PDTCH and PACCH channels.

4. (Currently Amended) A method as claimed in claim 3, ~~characterized by~~ further comprising indicating a resource part to be allocated to the PRACH channel by means of the downlink ~~resources~~ resource of the PCCCH channel and by relaying uplink state flag

USF information to a radio path in each downlink radio block of the PDCH resource included by the logical PCCCH channel, and wherein

the USF uplink state flag information of the downlink radio block ~~having~~ has a certain predetermined idle mode value, whereby the next uplink radio block in turn is used as the PRACH channel.

5. (Currently Amended) A method as claimed in claim 3, ~~characterized by~~ further comprising:

indicating the resource part to be allocated to the PRACH channel by means of the PCCCH downlink resource resources, and

relaying the uplink state flag USF information to the radio path in each downlink radio block of the PDCH resource included by the logical PCCCH channel, wherein

the USF uplink state flag information of the downlink radio block ~~having~~ has another value than a certain predetermined idle mode value, and the USF uplink state flag information ~~having~~ has such a value that the subscriber terminal (104) is unable to use the channel as the PRACH channel.

6. (Currently Amended) A method as claimed in claim 3, ~~characterized by~~ further comprising:

indicating the resource part to be allocated to the PRACH channel by means of the downlink resources of the PCCCH channel, and

relaying the uplink state flag USF information to the radio path in each downlink radio block of the PDCH resource included by the logical PCCCH channel, wherein

the USF information of the downlink radio block ~~having~~ has another value than a certain predetermined idle mode value, whereby the uplink packet traffic of the PDTCH and the PACCH channels of the subscriber terminal (104) allocated to the PDCH resource concerned is controlled by the USF uplink state flag information, and the USF uplink state flag information ~~having~~ has such a value that the subscriber terminal (104) is unable to use the channel as the PRACH channel.

7. (Currently Amended) A method as claimed in claim 1, ~~characterized by~~ further comprising measuring continually the base station system's processor load or the signalling load between the base station (100) and the base station controller (114).

8. (Currently Amended) A method as claimed in claim 1, ~~characterized by being~~  
wherein the method is utilized in the base station (100) and/or the base station controller  
(114).

9. (Currently Amended) A method as claimed in claim 1, ~~characterized by~~  
wherein the method is primarily ~~being~~ employed in the base station (100) and/or the base  
station controller (114), to which a high PRACH capacity is configured.

10. (Currently Amended) A telecommunication system comprising:  
a network part (100, 114, 116, 340),  
at least one subscriber terminal (104), and  
a telecommunication connection (108) between the network part (100, 114, 116, 340)  
and the subscriber terminal (104), and wherein ~~in which telecommunication system~~  
a base station system is arranged to use the telecommunication connection (108) for  
connection setup and data transfer,  
the telecommunication connection (108) ~~comprises~~ includes a channel for relaying  
channel allocation requests transmitted by the subscriber terminal to the network part (100,  
114, 116, 340), and  
~~characterized in that~~ the telecommunication system is arranged to control load by  
adjusting the capacity of the channel used for relaying the channel allocation requests.

11. (Currently Amended) A telecommunication system as claimed in claim 10,  
~~characterized in that~~ wherein when the base station system becomes overloaded, the  
telecommunication system is arranged to decrease PRACH channel capacity, and when the  
load drops to a desired level, the telecommunication system is arranged to increase the  
PRACH channel capacity.

12. (Currently Amended) A telecommunication system as claimed in claim 10,  
~~characterized in that~~ wherein the telecommunication system is arranged to configure a logical  
packet associated control channel PCCCH for the resource of a packet data channel PDCH  
comprised by the radio connection (108), which

the PDCH resource comprised by includes a the logical PCCCH channel is divided into an uplink resource and downlink resource, the uplink resources resource being divided between the PRACH channel, a packet data traffic channel PDTCH and a packet associated control channel PACCH, and which the

uplink resource, which is not fixedly configured as the PRACH channel, is being dynamically allocated to the PRACH, PDTCH and PACCH channels.

13. (Currently Amended) A telecommunication system as claimed in claim 12, ~~characterized in that~~ wherein the telecommunication system is arranged to indicate a resource part to be allocated to the PRACH channel by means of the downlink resources resource of the PCCCH channel,

the system is arranged to relay uplink state flag USF information to a radio path in each downlink radio block of the PDCH resource included by the logical PCCCH channel, and that

the USF uplink state flag information of the downlink radio block has a certain predetermined idle mode value, whereby the telecommunication system is arranged to use the next uplink radio block in turn as the PRACH channel.

14. (Currently Amended) A telecommunication system as claimed in claim 12, ~~characterized in that~~ wherein the system is arranged to indicate the resource part to be allocated to the PRACH channel by means of the downlink resources and to relay the uplink state flag USF information to the radio path in each downlink radio block of the PDCH resources included by the logical PCCCH channel,

the USF uplink stage flag information of the downlink radio block has another value than a certain predetermined idle mode value, and

the USF information has such a value that the subscriber terminal (104) is unable to use the channel as the PRACH channel.

15. (Currently Amended) A telecommunication system as claimed in claim 12, ~~characterized in that~~ wherein the system is arranged to indicate the resource part to be allocated to the PRACH channel by means of the downlink resources resource of the PCCCH channel, and arranged to relay the uplink state flag USF information to the radio path in each downlink radio block of the PDCH resource included by the logical PCCCH channel,

the downlink radio block uplink state flag USF information has another value than a certain predetermined idle mode value, whereby the telecommunication system is arranged to control the uplink packet traffic of the PDTCH and the PACCH channels of the subscriber terminal (104) allocated to the PDCH resource concerned by the USF uplink state flag information, and

A1 the USF uplink state flag information has such a value that the subscriber terminal (104) is unable to use the channel as the PRACH channel.

16. (Currently Amended) A telecommunication system as claimed in claim 10, ~~characterized in that~~ wherein the system is arranged to measure continually the base station system's processor load or the signalling load between the base station (100) and the base station controller (114).

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